

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for detecting chemotaxis of cells ~~with a structure wherein two wells are connected to each other via a channel having resistance to the passage of cells and each well has an opening for injecting cells or a specimen, characterized by having (1) a means of transporting a liquid and a means of stopping the transportation after the injection or the aspiration discharge of the liquid and (2) a means of sealing the opening(s) in one or both of the cell injection side and the specimen injection side~~ which comprises:

a cell-holding well having an opening for injecting cells;

a specimen-holding well having an opening for injecting a specimen;

a channel which connects said cell-holding well and specimen-holding well up with each other and has resistance to the passage of cells, and which detects chemotaxis of cells by observing a passage of cells in said channel from said cell-holding well to said specimen-holding well caused by a concentration gradient of said specimen formed in a stationary liquid in said channel;

a means of transporting said liquid from said cell-holding well to said specimen-holding well by an injection or an aspiration discharge of said liquid and then stopping the transportation of said liquid after said injection or said aspiration discharge of said liquid in order to control a position of each cell in said cell-holding well; and

a means of sealing said opening(s) in one or both of said cell-holding well and said specimen-holding well for preventing said liquid from an unexpected transportation thereof in said channel while detecting chemotaxis of cells.

2. **(Currently Amended)** The apparatus for detecting chemotaxis of cells as claimed in claim 1 ~~characterized in that~~ wherein said means of transporting a liquid and stopping the transportation thereof is a member selected from a pulse pump and a syringe.

3. **(Currently Amended)** The apparatus for detecting chemotaxis of cells as claimed in claim 1, ~~characterized in that~~ wherein said means of sealing the opening is a member selected from among a flexible stopper, a slide-type switching member, a tap, a valve and a combination thereof.

4. **(New)** The apparatus for detecting chemotaxis of cells as claimed in any one of claims 1 to 3, wherein

said means of sealing is a means of sealing said openings in both of said cell-holding well and said specimen-holding well, and said opening in said specimen-holding well is closed when said opening in said cell-holding well is opened and then said opening in said cell-holding well is closed when said opening in said specimen-holding well is opened.

5. **(New)** The apparatus for detecting chemotaxis of cells as claimed in any one of claims 1 to 3, wherein said cell-holding well and said specimen-holding well are connected via an injection pipe joined to said cell-holding well, an aspiration discharge pipe joined to said specimen-holding well and said means of transporting a liquid, and a stopper to stop the transportation thereof between said pipes, to form a structure in which said liquid is circulated.

6. (New) The apparatus for detecting chemotaxis of cells as claimed in any one of claims 1 to 3, wherein plural number of units, each of which units comprises said cell-holding well, said specimen-holding well and said channel, are connected to only one means of transporting a liquid and a stopper to stop the transportation thereof via said injection pipe so as to control a position of each cell in said individual cell-holding well.